Determining cut and fill

1 Add the before and after surfaces as themes to a view or 3D scene. These surfaces can be two grid themes, two TIN themes, or a grid theme and a TIN theme.

2 Activate both themes.

3 Choose Cut Fill from the Surface menu.

4 Using the dropdown list in the Cut Fill dialog, specify which surface is the before representation and press OK.

Cut-and-fill analysis determines how much material has been lost or gained in a study area by comparing two surface models of the area -- one before a change and one after.

The area needs to be properly represented in your surface models. Make sure that all locations outside the area cannot be interpolated; otherwise, the results could be incorrect. For grids this means assigning the NoData value to all cells outside the area, and for TINs, masking all outside triangles. You can accomplish the TIN masking by including the boundary of your study area in the triangulation process as a clip feature. See Creating a TIN from vector features.